UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/507,966	02/22/2000	Stuart A. Kauffman	9392-028-999	2744

20582 7590 11/20/2003	EXAMINER
PENNIE & EDMONDS LLP	STARKS, WILBERT L

1667 K STREET NW	ART UNIT	PAPER NUMBER
SUITE 1000	2121	
WASHINGTON, DC 20006		

DATE MAILED: 11/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No. ⬤	Applicant(s)
Offic Action Summary	09/507,966	KAUFFMAN ET AL.
	Examiner	Art Unit
	Wilbert L. Starks, Jr.	2121

-- The MAILING DATE of this communication appears n the cover sh et with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on <u>22 February 2000</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) <u>1-33</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) <u>1-4,6,12,14-17,19-22,24-26 and 33</u> is/are rejected.

7)☐ Claim(s) <u>5,7-11,13,18,23 and 27-32</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

13)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application)
since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.
37 CFR 1.78.

    a) ☐ The translation of the foreign language provisional application has been received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific
reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)   4)☐ Interview Summary (PTO-413) Paper No(s). _____ .

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)   5)☐ Notice of Informal Patent Application (PTO-152)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .   6)☐ Other: .

DETAILED ACTION

Oath/Declaration

1.   The oath or declaration is defective. A new oath or declaration in compliance

with 37 CFR 1.67(a) identifying this application by application number and filing date is

required. See MPEP §§ 602.01 and 602.02.

> The oath or declaration is defective because it was not executed in accordance
> with either 37 CFR 1.66 or 1.68.

Drawings

2.   New corrected drawings are required in this application because the drawings

submitted with the present application are hand-drawn and informal. Some of the

features are consequently illegible. Applicant is advised to employ the services of a

competent patent draftsperson outside the Office, as the U.S. Patent and Trademark

Office no longer prepares new drawings. The corrected drawings are required in reply to

the Office action to avoid abandonment of the application. The requirement for

corrected drawings will not be held in abeyance.

Claim Rejections - 35 U.S.C. § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. §102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4.   Claims 1-4, 6, 12, 14-17, 19-22, 24-26, and 33 are rejected under 35

U.S.C. §102(b) as being anticipated by Mi, Peiwei et al, *A Meta-Model for Formulating*

Knowledge-Based Models of Software Development, Decision Support Systems, 17(3),

313-330, 1996.

Claim 1

Claim 1's "a plurality of devices corresponding to the plurality of resources, each

of said devices performing the steps of:" is anticipated by Mi, et al, p.1, Abstract, where

it recites:

> The URM includes specialized models for software systems, documents,
> agents, tools, and development processes.

Claim 1's "characterizing said corresponding resource; and" is anticipated by Mi,

et al, p.1, Abstract, where it recites:

> To explore these features, we describe the URM both formally and with a
> detailed example, followed by a **characterization** of the process of SDM
> composition, and then by a characterization of the lifecycle of activities
> involved in an overall model formulation process.

Claim 1's "determining at least one relation between said corresponding resource

and others of said plurality of resources." is anticipated by Mi, et al, p.1, Abstract, where

it recites:

> The URM consists of *resource classes* and a *web of **relations*** that link
> different types of resources found in different kinds of models of software
> development.

Claim 2

Claim 2's "selecting at least one of said resources having said at least one

relation; and" is anticipated by Mi, et al, p.1, Abstract, where it recites:

> The URM consists of *resource classes* and a *web of **relations*** that link
> different types of resources found in different kinds of models of software
> development.

Claim 2's "transforming said selected resources to form at least one new

resource in the environment." is anticipated by Mi, et al, p. 21, last paragraph, where it

recites:

> In short, these heuristics examine which classes of the necessary resources
> are unavailable, available but already in use elsewhere, available but broken,
> similar type available, or available as well as with multi-resource
> combinations (e.g., process A subsumes process B which requires a certain
> class of tool and certain class of staff).

Claim 3

Claim 3's "A system for performing operations management as in claim 2

wherein said characterizing said corresponding resource step comprises the step of

representing characteristics with a plurality of properties and/or processes." is

anticipated by Mi, et al, p.1, Abstract, where it recites:

> To explore these features, we describe the URM both formally and with a
> detailed example, followed by a **characterization** of the process of SDM
> composition, and then by a characterization of the lifecycle of activities
> involved in an overall model formulation process.

Claim 4

Claim 4's "identifying matching ones of said properties and/or processes to form

a plurality of matching groups;" is anticipated by Mi, et al, p. 21, where it recites:

> The first is that of finding or matching a candidate software process model
> for composition...

Claim 4's "evaluating said matching groups by computing how well said attributes

match; and" is anticipated by Mi, et al, p. 21, where it recites:

> Therefore, it is necessary to establish some criteria or measure of
> acceptable distance from an exact match i.e., acceptable partial match
> metrics.

Claim 4's "selecting at least one of said matching groups that are optimal with

respect to said evaluation." is anticipated by Mi, et al, p. 21, where it recites:

> Therefore, it is necessary to establish some criteria or measure of
> acceptable distance from an exact match i.e., acceptable partial match
> metrics.

Claim 6

Claim 6's "determining a graph representation of said resources and said

relations.

Claim 12

Claim 12's "A system for performing operations management as in claim 1

wherein each of said devices comprise data to identify said corresponding resource.

Claim 14

Claim 14's "a plurality of devices corresponding to the resources, each of said

devices performing the step of:" is anticipated by Mi, et al, p.1, Abstract, where it recites:

> The URM includes specialized models for software systems, documents,
> agents, tools, and development processes.

Claim 14's "characterizing said corresponding resources; and" is anticipated by

Mi, et al, p.1, Abstract, where it recites:

> To explore these features, we describe the URM both formally and with a
> detailed example, followed by a **characterization** of the process of SDM
> composition, and then by a characterization of the lifecycle of activities
> involved in an overall model formulation process.

Claim 14's "selectively transforming said corresponding resource.

Claim 15

Claim 15's "determining a plurality of candidate transformations of said

corresponding resource; and" is anticipated by Mi, et al, p. 21, last paragraph, where it

recites:

> In short, these heuristics examine which classes of the necessary resources
> are unavailable, available but already in use elsewhere, available but broken,
> similar type available, or available as well as with multi-resource
> combinations (e.g., process A subsumes process B which requires a certain
> class of tool and certain class of staff).

Claim 15's "evaluating at least one expected consequence of performing said at least one candidate transformation on a subset, P, of the plurality of resources. " is anticipated by Mi, et al, p. 21, where it recites:

> Therefore, it is necessary to establish some criteria or measure of
> acceptable distance from an exact match i.e., acceptable partial match
> metrics.

Claim 16

Claim 16's "performing said selected candidate transformation." is anticipated by Mi, et al, p. 21, where it recites:

> Therefore, it is necessary to establish some criteria or measure of
> acceptable distance from an exact match i.e., acceptable partial match
> metrics.

Claim 17

Claim 17's "A system for performing operations management as in claim 15 wherein said subset, P, of the plurality of resources is a proper subset." is anticipated by Mi, et al, p. 21, where it recites:

> Therefore, it is necessary to establish some criteria or measure of
> acceptable distance from an exact match i.e., acceptable partial match
> metrics.

Claim 19

Claim 19's "determining a plurality of candidate transformations of said corresponding resource;" is anticipated by Mi, et al, p. 21, where it recites:

> The first is that of finding or matching a candidate software process model for composition...

Claim 19's "assigning said corresponding resource to at least one patch of said resources;" is anticipated by Mi, et al, p. 21, where it recites:

> The first is that of finding or matching a candidate software process model for composition...

Claim 19's "evaluating a utility of said patch of resources of performing said candidate transformations; and" is anticipated by Mi, et al, p. 21, where it recites:

> Therefore, it is necessary to establish some criteria or measure of acceptable distance from an exact match i.e., acceptable partial match metrics.

Claim 19's "selecting at least one of said candidate transformations that is optimal with respect to said utility. " is anticipated by Mi, et al, p. 21, where it recites:

> Therefore, it is necessary to establish some criteria or measure of acceptable distance from an exact match i.e., acceptable partial match metrics.

Claim 20

Claim 20's "A system for performing operations management as in claim 19

wherein said patch is a proper subset of the plurality of resources." is anticipated by Mi,

et al, p. 21, where it recites:

> Therefore, it is necessary to establish some criteria or measure of
> acceptable distance from an exact match i.e., acceptable partial match
> metrics.

Claim 21

Claim 21's "A system for performing operations management as in claim 19

wherein said at least one patch is at least one disjoint subset of the plurality of

resources." is anticipated by Mi, et al, p. 21, where it recites:

> Therefore, it is necessary to establish some criteria or measure of
> acceptable distance from an exact match i.e., acceptable partial match
> metrics.

Claim 22

Claim 22's "a plurality of devices corresponding to the plurality of resources, each

of said devices performing the steps of representing said corresponding resource with

data; and" is anticipated by Mi, et al, p.1, Abstract, where it recites:

> To explore these features, we describe the URM both formally and with a
> detailed example, followed by a **characterization** of the process of SDM
> composition, and then by a characterization of the lifecycle of activities
> involved in an overall model formulation process.

Claim 22's "transmitting said characterizing of said corresponding resource to others of said plurality of devices; and" is anticipated by Mi, et al, p.1, Abstract, where it recites:

> To explore these features, we describe the URM both formally and with a detailed example, followed by a **characterization** of the process of SDM composition, and then by a characterization of the lifecycle of activities involved in an overall model formulation process.

Claim 22's "at least one computer, said computer performing the steps of:" is anticipated by Mi, et al, p. 17, where it recites:

> This set of documents is designed around an object called a **Computer Software Configuration Item (CSCI)**...

Claim 22's "receiving said data for said at least one devices; and" is anticipated by Mi, et al, p. 12, where it recites:

> It consists of a development process model as its enactment plan, a software model as the basis for its product, an agent model for its performers, a set of optional other resource models as its input and an optional tool model.

Claim 22's "determining at least one relation among the resources for said data." is anticipated by Mi, et al, p.1, Abstract, where it recites:

> The URM consists of *resource classes* and a *web of relations* that link different types of resources found in different kinds of models of software development.

Claim 24

Claim 24's "defining at least one algorithm having one or more parameters for performing operations management;

Claim 24's "defining at least one global performance measure of said at least one algorithm; " is anticipated by Mi, et al, p. 21, where it recites:

> Therefore, it is necessary to establish some criteria or measure of acceptable distance from an exact match i.e., acceptable partial match metrics.

Claim 24's "executing said algorithm for a plurality of different values of said one or more parameters to generate a corresponding plurality of values for said global performance measure; " is anticipated by Mi, et al, p. 21, where it recites:

> Therefore, it is necessary to establish some criteria or measure of acceptable distance from an exact match i.e., acceptable partial match metrics.

Claim 24's "constructing a fitness landscape from said values of said parameters and said corresponding values of said global performance measure; and" is anticipated by Mi, et al, p. 21, where it recites:

> Therefore, it is necessary to establish some criteria or measure of acceptable distance from an exact match i.e., acceptable partial match metrics.

Claim 24's "optimizing over said fitness landscape to generate optimal values for said at least one parameter.

Claim 25

Claim 25's "representing the plurality of resources with a corresponding plurality of devices wherein each of said devices performs the steps of:" is anticipated by Mi, et al, p.1, Abstract, where it recites:

> The URM includes specialized models for software systems, documents, agents, tools, and development processes.

Claim 25's "characterizing said corresponding resource; and" is anticipated by Mi, et al, p.1, Abstract, where it recites:

> To explore these features, we describe the URM both formally and with a detailed example, followed by a **characterization** of the process of SDM composition, and then by a characterization of the lifecycle of activities involved in an overall model formulation process.

Claim 25's "selectively transforming said corresponding resource." is anticipated by Mi, et al, p. 21, last paragraph, where it recites:

> In short, these heuristics examine which classes of the necessary resources are unavailable, available but already in use elsewhere, available but broken, similar type available, or available as well as with multi-resource combinations (e.g., process A subsumes process B which requires a certain class of tool and certain class of staff).

Claim 26

Claim 26's "A method for performing operations management as in claim 25 wherein said at least one parameter comprises a proportion, p of the plurality of resources." is anticipated by Mi, et al, p. 21, where it recites:

Therefore, it is necessary to establish some criteria or measure of
acceptable distance from an exact match i.e., acceptable partial match
metrics.

Claim 33

Claim 33's "code to characterize said corresponding resource; and" is anticipated

by Mi, et al, p.1, Abstract, where it recites:

To explore these features, we describe the URM both formally and with a
detailed example, followed by a **characterization** of the process of SDM
composition, and then by a characterization of the lifecycle of activities
involved in an overall model formulation process.

Claim 33's "code to determine at least one relation between said corresponding

resource and others of said plurality of resources." is anticipated by Mi, et al, p.1,

Abstract, where it recites:

The URM consists of *resource classes* and a *web of relations* that link
different types of resources found in different kinds of models of software
development.

Allowable Subject Matter

5.   Claims 5, 7-11, 13, 18, 23, and 27-32 are objected to as being dependent upon a

rejected base claim, but would be allowable if rewritten in independent form including all

of the limitations of the base claim and any intervening claims.

Conclusion

6.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

A.   Papierniak et al (U.S. Patent Number 6,128,624; dated 10/03/2000; class 707;

subclass 104) teaches the collection and integration of Internet and electronic

commerce data in a database during web browsing.

B.   Cox et al (U.S. Patent Number 5,812,533; dated 09/22/1998; class 370; subclass

259) teaches service provision in communications networks.

C.   Benveniste (U.S. Patent Number 5,809,423; dated 09/15/1998; class 455;

subclass 452.2) teaches adaptive-dynamic channel assignment organization

system and method.

D.   Benveniste et al. (U.S. Patent Number 5,513,379; dated 04/30/1996; class 455;

subclass 451) teaches an apparatus and method for dynamic resource allocation

in wireless communication networks utilizing ordered borrowing.

Any inquiry concerning this communication or earlier communications from the

Examiner should be directed to Wilbert L. Starks, Jr. whose telephone number is (703)

305-0027.

Alternatively, inquiries may be directed to the following:

S. P. E. Anil Khatri   **(703) 305-0282**
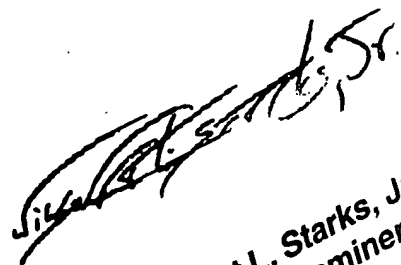
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WLS

15 November 2003

Wilbert L. Starks, Jr.
Primary Examiner
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